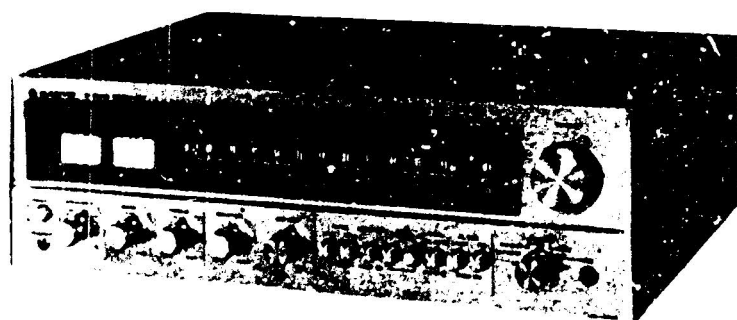




SANYO

**SANYO
STEREO RECEIVER
DCX 8000K
SERVICE MANUAL**



SPECIFICATIONS

GENERAL

IC Transistors	2SC693 X 3, 2SA726 X 4 2SA649 X 1, 2SC536 X 8 2SC1313 X 10, 2SB511 X 1 2SC674 X 1, 2SA659 X 1 2SD325 X 2, 2SC929 X 1 2SC875 X 2, 2SC1175 X 3 2SA532 X 1 2SD323 X 1, 2SC930 X 6
Diodes	1S188 X 9, RD24A-N X 1 RD-13A X 1, RD24A-M X 1 DS-430 X 4
Silicon rectifiers	S3RC40 X 1, S3RC40R X 1
Power source	AC120, 200, 220, 240V 50/60Hz AC220, 110V 50Hz (in Europe)
Power consumption	210W
Dimmension (approx.)	455 (W) X 340 (D) X 148 (H) mm 17-15/16" X 13-3/8" X 5-7/8"
Weight (approx.)	11.5 kg 25.1 lbs.

FM TUNER SECTION

Frequency Range	88 - 108 MHz
IF	10.7 MHz
Aerial Impedance	300 ohms balanced 75 ohms unbalanced
30 dB S/N Sensitivity	2.0 μ V
Usable Sensitivity (IHF)	2.0 μ V
Capture Ratio	2.0 dB
Image Rejection	85 dB (98 MHz)
IF Rejection	95 dB (98 MHz)
AM Suppression	50 dB (98 MHz)
Signal to Noise Ratio	70 dB (98 MHz)
Harmonic Distortion	Mono: 0.3 % (100 % Mod.) Stereo: 0.5 % (100 % Mod.)
Stereo Separation	40 dB
Selectivity (IHF)	60 dB

AM TUNER SECTION

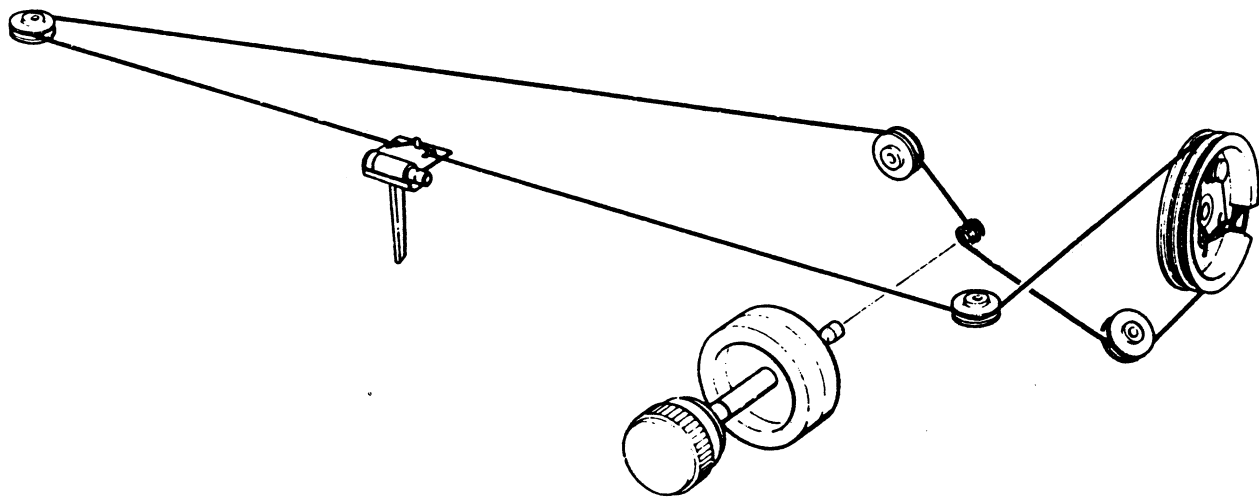
Frequency range	535 - 1,605 kHz
20 dB S/N Sensitivity	300 μ V/m

Usable Sensitivity (IHF)	250 μ V/m
Image Rejection	45 dB
IF Rejection	35 dB
Signal to Noise Ratio	45 dB
Selectivity	25 dB

AUDIO AMPLIFIER SECTION

Total music power	150W
Continuous power/chan.	50/50W each channel drive 40/40W both channel drive
Total harmonic distortion (50W output power)	0.5 %
Power band width	10 - 60,000 Hz
1 watt frequency response	20 - 50,000 Hz
Hum and noise	Less than 3mV
Input sensitivity & impedance	PHONO 1 2.5mV 50K ohm PHONO 2 2.5mV 50K ohm MIC 2.5mV 50K ohm AUX 180mV 100K ohm
Matching speaker impedance	4 - 16 ohm (8 ohm nominal)
Damping factor	30 at 8 ohm, 1K Hz
Loudness control	100 Hz +10 dB 10K Hz +6 dB Fc = 70 Hz (12 dB/oct)
Low filter	-20 dB at 1K Hz
Audio muting	500mV
Pre amplifier output	500mV/50K ohm
Main amp. input sensitivity	RCA 180mV DIN 35mV
Tape output sensitivity	RCA 180mV 100K ohm DIN 180mV 100K ohm
Tape input sensitivity & impedance	PHONO 1 more than 70 dB PHONO 2 more than 70 dB MIC more than 50 dB AUX more than 80 dB
Signal to noise ratio	

DIAL CORD STRING



ADJUSTMENT

AM ADJUSTMENT

Step	Adjusting circuit	Connections		SG. Frequency	Position of tuning dial	Adjustment	V.T.V.M. Oscilloscope
		Input	Output				
1	IF	Connect sweep generator to VC7.	Connect oscilloscope to AM OUT (TP 2)	455 KHz	Near max. capacity of VC. at position with no unrequired signal.	1st 9-20970 AM 2nd 9-21020 3rd 9-21030	 455 KHz
2	RF	Connect standard loop aerial to output terminal of SG. Place the unit 2 feet from loop aerial.	Connect V.T.V.M. to AM OUT	600 KHz (400 Hz, 30% modulation)	600 KHz	AM AERIAL 9-21022 AM OSC 9-20740 RF COIL 9-20291	Max.
3				1400 KHz (400 Hz, 30% modulation)	1400 KHz	TC5 TC6 TC7	Max.
4	Repeat adjustments.						

PREPARE

- Variable capacitor completely closed.
- Set the dial pointer to very left line dial scale.
- Connect sweep generator. SG, V.T.V.M. and oscilloscope.
- Selector switch to "AM"
- Use a screwdriver with plastic grip for all adjustments.

FM ADJUSTMENT

Step	Adjusting circuit	Connections		SG. frequency	Position of tuning dial	Adjustment	V.T.V.M. Oscilloscope
		Input	Output				
1	IF	Connect sweep generator to test point of the FRONT END through 0.01 μ F.	Connect oscilloscope to FRONT END	10.7 MHz (non modulation)	Near max. capacity of VC. at f position with no unrequired signal.	IFT of the FRONT END	 10.7 MHz
2	Ratio Det.		Connect oscilloscope to FM OUT			FM DET 9-21000	 10.7 MHz
3	RF	Connect FM SG. to FM AERIAL terminals.	Connect V.T.V.M. to speaker terminal.	90 MHz (400 Hz, 30% modulation)	90 MHz	FM AERIAL COIL FM OSC COIL 1st RF COIL 2nd RF COIL	Max.
4				106 MHz (400 Hz, 30% modulation)	106 MHz	TC1 TC2 TC3 TC4	Max.
5	Repeat adjustments.						

PREPARE

- Variable capacitor completely closed.
- Set the dial pointer to very left line of dial scale.
- Connect sweep generator, FM SG, V.T.V.M. and oscilloscope.
FM aerial input impedance is 300 ohm.
- Selector switch to "FM"
- Use a screwdriver with plastic grip for all adjustments.

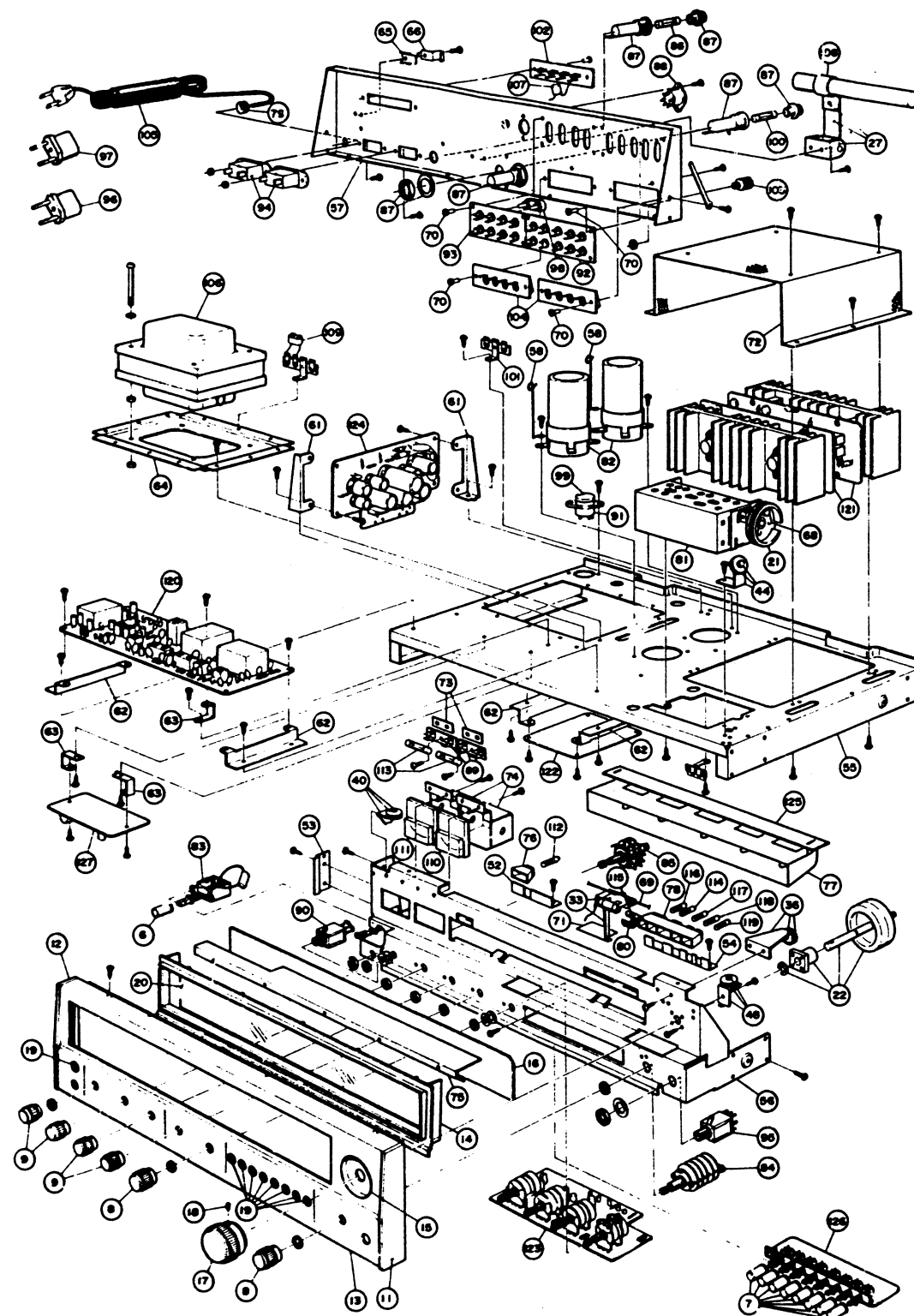
FM MPX ADJUSTMENT

Step	Adjusting circuit	Connections		Position of tuning dial	Adjustment	V.T.V.M.
		Input	Output			
1	19 KHz pilot signal	Connect FM stereo SG. to FM aerial terminals. 19 KHz signal ON. SCA signal OFF.	Connect V.T.V.M. to test point PIN No. 1 of IC (LA3300)	Near max. capacity of VC. at position with no unrequired signal.	19 KHz 9-20210 (Black)	Max.
2	38 KHz	Connect FM stereo SG. to FM aerial terminals. 19 KHz signal ON Main channel, sub channel signal ON.	Connect V.T.V.M. to test point PIN No. 13 of IC (LA3300)		38 KHz 9-20220 (White)	Max.
3	FM stereo signal separation	Add 1000Hz signal from L Ch.	Connect V.T.V.M. to R output		Separation control VR-1	Min.
4		Connect FM stereo SG. to FM aerial terminals. 19 KHz signal ON. Main channel, sub channel signal ON. Add 1000Hz signal from R Ch.	Connect V.T.V.M. to L output		38 KHz 1) Set the pre-set resistor (1K-Ω) connected to PIN No 5 of IC401 to the minimum position 2) Adjust the pre-set resistor so that sine wave appeared at output becomes clear and minimum	Min.
5	Repeat steps 3-4. Set at position with max. channel separation.					

PREPARE

- Variable capacitor completely closed.
- Connect FM stereo SG. and V.T.V.M.
- Selector switch to "FM AUTO"
- Use a screwdriver with plastic grip for all adjustments.

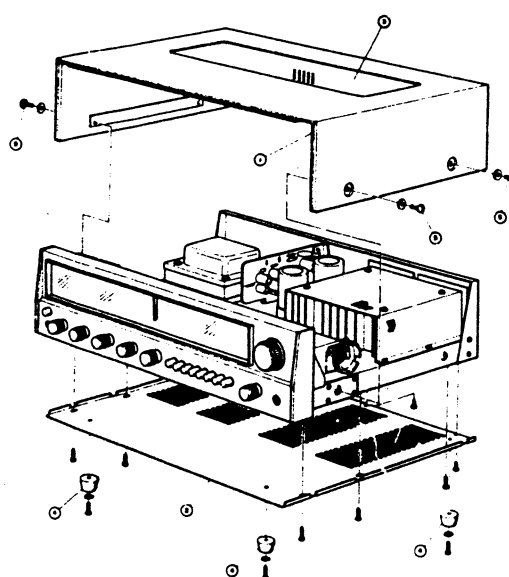
EXPLODED VIEW



PARTS LIST

Key No.	Part No.	Description	Q'ty
PACKING			
	4 2449 20230	Aerial, FM	1
	131 6 1139 43003	Box, Corrugate exp	1
	131 6 2119 00850	Bag, Polyethylen exp	1
	131 6 2719 10300	Bag, Fan	1
	131 6 3009 17640	Pad	2
	131 6 4119 33400	Explanatory booklet (exc. Europe)	1
	131 6 4119 33401	Explanatory booklet (in Europe)	1
	131 6 4159 14700	Notes	1
	131 6 4559 10100	Manufacturing No	1
	131 6 9459 00100	Rubber band	2
CABINET			
1	131 2 1101 22501	Cabinet	1
2	131 2 1105 14000	Plate, Bottom	1
3	131 2 1312 11001	Grill	1
4	131 2 1804 10600	Leg, Rubber	4
5		Screw, Truss hd. 4x16	4
		Washer, 4.2x14x1.0	4
		Washer, 4.2x10x1.0	4
		Screw, Pan hd. 4x10	6
		Screw, Pan hd. 4x12	4
		Screw, Pan hd tapping 3x6	4
APPEARANCE			
6	131 0 1001 23300	Knob Assy, Power	1
7	131 0 1001 23400	Knob Assy, Push	8
8	131 0 1001 23500	Knob Assy, Volume, Function	2
9	131 0 1001 23600	Knob Assy, SP, Balance, Bass, Treble	4
	131 0 1016 16800	Panel Decorate Assy	1
11	131 2 1311 32800	Sash, Right	1
12	131 2 1311 32801	Sash, Left	1
13	131 2 1203 26900	Panel, Control	1
14	131 2 1116 11700	Frame	1
15	131 2 1116 11800	Frame	1
16	131 2 1201 23302	Plate Dial	1
17	131 2 1601 26400	Knob, Tuning	1
18	131 2 4201 12400	Screw, Tuning Knob	1
19	131 2 6111 12600	Bushing	9
20	131 2 6308 15000	Filter	1

EXPLODED VIEW

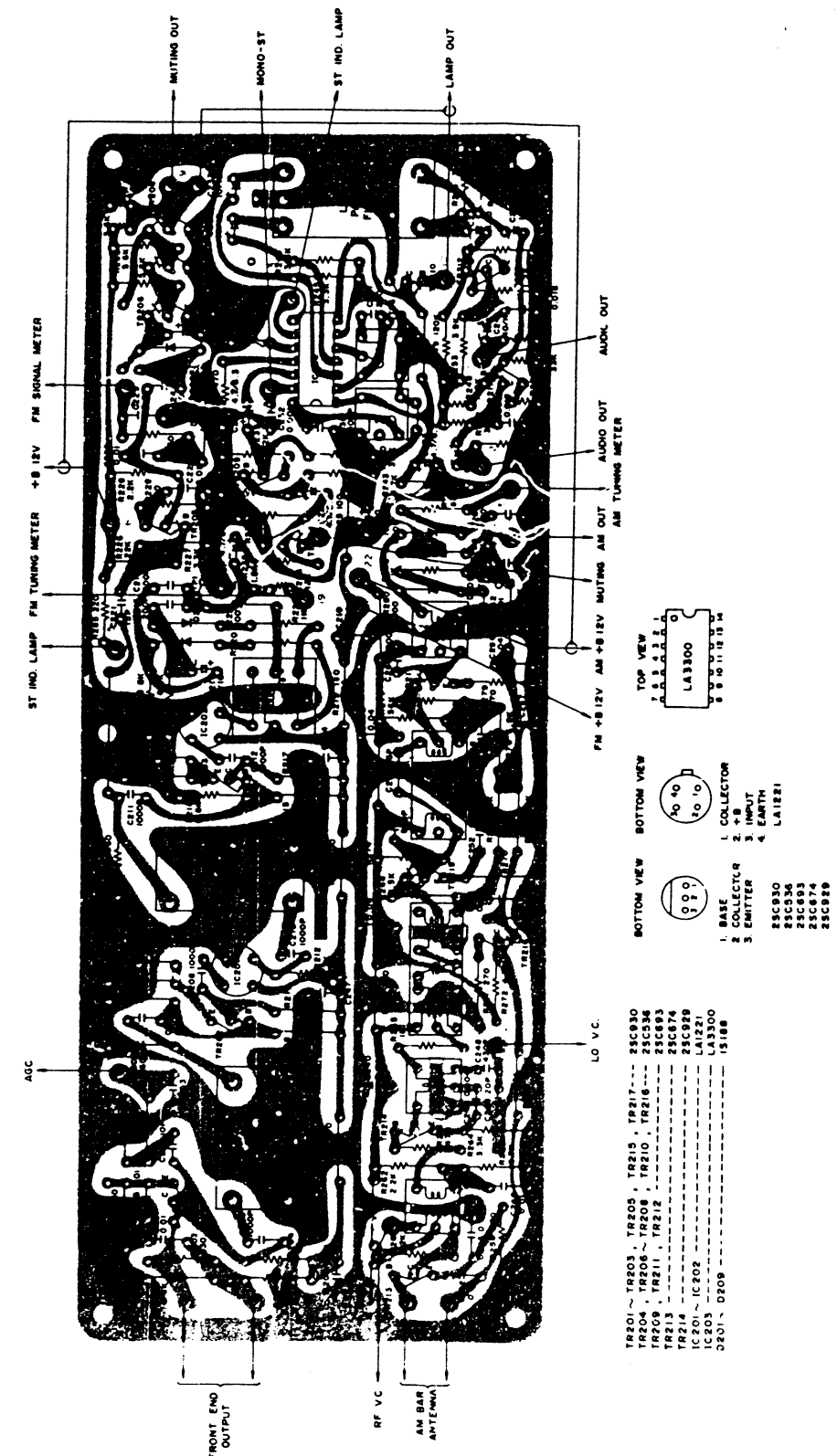


Key No.	Part No.	Description	Q'ty
CHASSIS			
21	131 0 3002 10800	Drum Assy	1
22	131 0 3003 15400	Shaft, Dial Assy	1
27	131 0 3008 11700	Support, Aerial Assy	1
33	131 0 3011 13600	Pointer Assy	1
36	131 0 3020 02000	Pully Assy	1
40	131 0 3020 02300	Pully Assy	1
44	131 0 3020 02500	Pully Assy	1
48	131 0 3020 02600	Pully Assy	1
52	131 2 3101 19700	Metal Mount, FM Stereo ind.	1
53	131 2 3101 19900	Metal Mount, Plate dial	1
54	131 2 3101 20600	Metal Mount, Function ind.	1
55	131 2 3301 18801	Chassis	1
56	131 2 3305 16100	Panel, Front	1
57	131 2 3306 16001	Panel, Rear (exc. Europe)	1
	131 2 3306 16003	Panel, Rear (in. Europe)	1
58	131 2 3608 11200	Cramp Wire	2
	131 2 3608 11700	Cramp Wire	10
	131 2 3608 11701	Cramp Wire	10
61	131 2 3614 13300	Mount, Power P.C.B.	2
62	131 2 3614 15000	Mount, IF, P.C.B. EQ P.C.B.	4
63	131 2 3614 15100	Mount, IF, P.C.B.	1
64	131 2 3617 12700	Metal Mount, Trans	1
65	131 2 3621 00400	Metal, Cramp Wire	1
66	131 2 3621 00500	Metal, Cramp Wire	1
	131 2 4106 13100	Metal Mount, Pulley	1
68	131 2 4111 00300	Rope Spring	1
69	131 2 4112 10200	Rope 0.5	1
70	131 2 4221 00100	Rivet	14
71	131 2 5205 12000	Cushion	1
72	131 2 6103 13000	Cover, Shield	1
73	131 2 6107 13900	Plate Sever, Metal Lamp Holder	2
74	131 2 6110 19900	Shelter Light, Tuning Meter	2
75	131 2 6110 20000	Shelter Light, Fram up	1
76	131 2 6110 20100	Shelter Light, FM Stereo ind	1
77	131 2 6110 20900	Shelter Light, Plate Dial	1
78	131 2 6110 21000	Shelter Light, Function ind	1
79	131 2 6111 11300	Bushing, Power coad	1
80	131 2 6308 14200	Filter, Pilot Lamp	1
		Screw, Pan hd. 3x6	2
		Screw, Pan hd. 3x10	4
		Screw, Bind hd. 4x10	1
		Screw, Pan hd. Tapping 3x6	93
		Screw, Pan hd. Tapping 3x12	8
		Hex. Not 3mm	4
		Hex. Not 4mm	4
ELECTRICAL PARTS			
81	4 1259 20300	Front end	1
82	4 2239 20550	Electric Capacitor 4700 μ F 50V	2
83	4 2319 23090	Switch, Push	1
84	4 2319 23170	Switch, Rotary, Function	1
85	4 2319 23180	Switch, Rotary, Speaker	1
	4 2319 21531	Switch, Slide 6P (in Europe)	1
86	4 2349 20020	Fuse 3A, Line Protector (exc. Europe)	1
	4 2349 20580	Fuse 3.15A (in Europe)	1
100	4 2349 20271	Fuse 4A, Power Protector (exc Europe)	2
	4 2349 20600	Fuse 5A Slow (in Europe)	1
89	4 2359 20160	Fuse Holder	2
88	4 2359 20190	Socket, 5P DIN	1
87	4 2359 20200	Socket	3
90	4 2359 21080	Jack, Headphone	1
91	4 2359 21220	Power Select Socket (exc Europe)	1
92	4 2359 21240	Socket, Phono 10P	1
93	4 2359 21260	Socket, Phono 8P	1
94	4 2359 21490	AC Socket (exc. Europe)	2
	4 2359 21020	Socket (in Europe)	3
95	4 2359 16700	Jack, Mic	1
96	4 2369 20260	Plug, Conversion (exc. Europe)	1
97	4 2369 20270	Plug, Conversion (exc. Europe)	1
98	4 2369 20520	Plug, Connector	2
99	4 2369 20550	Power Select Plug (exc. Europe)	1
128	4 2379 20150	Terminal, Base	1
101	4 2379 20400	Terminal Lug 3P	1
	4 2379 20490	Terminal Lug 1-1P	1
102	4 2379 21050	Terminal, Aerial	1
103	4 2379 21060	Terminal	1
104	4 2379 21210	Terminal SP 4P	2

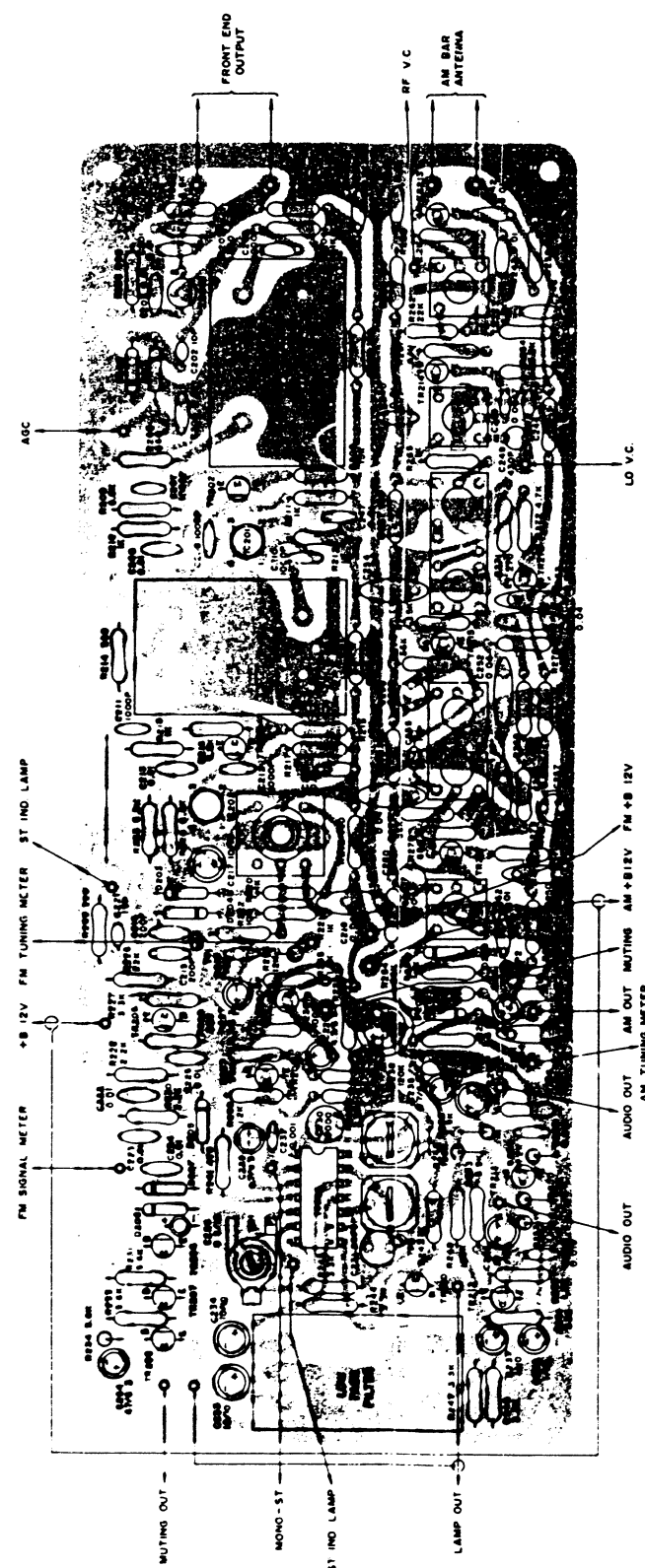
NOTES: 1. Part orders must contain Model Number, Part Number and Description.
 2. Unless otherwise noted, component parts indicated by parentheses in the column Q'ty are not available.
 3. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

Key No.	Part No.	Description	Q'ty
ELECTRICAL PARTS			
105	4 2439 20390	Power Cord (exc. Europe)	1
	4 2439 20521	Power Cord (in Europe)	1
106	4 2519 22920	Power Transformer (exc. Europe)	1
	4 2519 22921	Power Transformer (in Europe)	1
107	4 2539 20121	IF Trap	3
108	4 2579 21022	Bar Aerial AM	1
109	4 2599 20300	Balun	1
110	4 5119 20341	Meter, Signal (exc. Europe)	1
	4 5119 20342	Meter, Signal (in Europe)	1
111	4 5119 20350	Meter, Tuning (exc. Europe)	1
	4 5119 20351	Meter, Tuning (in Europe)	1
112	4 6129 20147	Pilot Lamp, 6.3V 25mA	1
113	4 6129 20260	Pilot Lamp, Fuse Type	2
114	4 6129 20302	Pilot Lamp, Function ind.	1
119	4 6129 03700	Pilot Lamp, Function ind.	1
116	4 6129 20371	Pilot Lamp, Function ind.	1
117	4 6129 20372	Pilot Lamp, Function ind.	1
118	4 6129 20373	Pilot Lamp, Function ind.	1
	131 0 4006 00100	Plug, Photex	1
(CAPACITORS)			
C904,905,906,907		PP 0.01 μ F 630V 0V $\pm$ 20%	1
		Ceramic 0.04 μ F 50V $\pm$ 20%	4
(RESISTORS)			
R905,906		Carbon 560 ohm $\frac{1}{2}$ W $\pm$ 10%	2
R907		Carbon 82K ohm $\frac{1}{2}$ W $\pm$ 10%	1
R903,904		Carbon 100K ohm $\frac{1}{2}$ W $\pm$ 10%	2
R908		Carbon 180K ohm $\frac{1}{2}$ W $\pm$ 10%	1
R901,902		Carbon 390K ohm $\frac{1}{2}$ W $\pm$ 10%	2
IF, MPX P.C.B. ASSY			
120	131 0 4001 41800	IF MPX P.C.B. assy	1
	4 2229 22950	Variable resistor, separation	1
	4 2279 20150	Low pass filter	1
	4 2569 20970	IF trans, AM 1st	1
	4 2569 21000	IF trans, FM discrn	1
	4 2569 21020	IF trans, AM 2nd.	1
	4 2569 21030	IF trans, AM	1
	4 2569 21100	FM IF filter	2
	4 2589 20740	AM OSC coil	1
	4 2599 20291	AM RF coil	1
	4 2659 20210	Multiplex coil 19K Hz	1
	4 2659 20220	Multiplex coil 38 K Hz	1
(CAPACITORS)			
C202		Ceramic 10PF $\pm$ 0.5pF 50 WV	1
C255,221		Ceramic 15PF $\pm$ 10% 50 WV	2
C244		Ceramic 20PF $\pm$ 10% 50 WV	1
C218		Ceramic 250PF $\pm$ 10% 50 WV	1
C215,216		Ceramic 200PF $\pm$ 10% 50 WV	2
C206,207		Ceramic 0.001 μ F $\pm$ 10% 50 WV	6
208,210			
211,212			
C232		Mylar 0.001 μ F $\pm$ 20% 50 WV	1
C249		Mylar 0.0047 μ F $\pm$ 20% 50 WV	1
C238,239		Mylar 0.018 μ F $\pm$ 5% 50 WV	2
C236,237		Electrolytic 1 μ F 10V	2
C277,228		Electrolytic 4.7 μ F 6V	4
229,235			
C217,233		Electrolytic 10 μ F 10V	6
234,240			
241,257			
C264		Electrolytic 47 μ F 6V	1
C220		Electrolytic 100 μ F 16V	1
C248		Styrol 430pF $\pm$ 10% 50V	1
C256		Styrol 820pF $\pm$ 10% 50V	1
C260		Styrol 1000PF $\pm$ 10% 50V	1
C231		Styrol 2500pF $\pm$ 10% 50V	1
C230		Styrol 10000PF $\pm$ 10% 50V	1
C226		Aliscon 0.2 μ F $\pm$ 20% 10V	1
C201,203		Ceramic 0.01 μ F $\pm$ 80 -20% 50V	18
204,205			
209,213			
214,222			
223,224			
225,242			
243,245			

Key. No.	Part No.	Description	Q'ty
IF, MPX P.C.B. ASSY			
246,262 263,247, C219,250 251,252 253,254 258,259 261		Ceramic 40000PF +80 - 20% 50V	9
(RESISTORS)			
R207,213, 222, 225,259, 267,275, 280 R210		Carbon 100 ohm ±10% ¼W	8
R229,265, R271		Carbon 180 ohm ±10% ¼W	1
R203,270		Carbon 220 ohm ±10% ¼W	2
R241,261, 279		Carbon 270 ohm ±10% ¼W	1
R206,214 R205,258, 278		Carbon 330 ohm ±10% ¼W	2
R204,210, 211,212, 217,218, 220,221, 242,265, 282		Carbon 470 ohm ±10% ¼W	3
R239,255 R254		Carbon 560 ohm ±10% ¼W	2
R268, R235		Carbon 680 ohm ±10% ¼W	3
R228,260 230		Carbon 1K ohm ±10% ¼W	11
R227,244, 245,246, 247,264		Carbon 1.2K ohm ±10% ¼W	2
R240,253 R252		Carbon 1.2K ohm ±10% ¼W	1
R243,263, 272		Carbon 1.5K ohm ±10% ¼W	1
R202,231, 233,281		Carbon 1.8K ohm ±10% ¼W	1
R234 R209,216, 223,224, 266,276		Carbon 2.2K ohm ±10% ¼W	3
R269,273, 283		Carbon 3.3K ohm ±10% ¼W	6
R286 R208,215		Carbon 3.9K ohm ±10% ¼W	2
R201,226, 262		Carbon 3.9K ohm ±10% ¼W	1
R237,251 R250		Carbon 4.7K ohm ±10% ¼W	3
R274,277, 284		Carbon 5.6K ohm ±10% ¼W	4
R236,256		Carbon 5.6K ohm ±10% ¼W	1
		Carbon 6.8K ohm ±10% ¼W	6
		Carbon 10K ohm ±10% ¼W	3
		Carbon 12K ohm ±10% ¼W	1
		Carbon 15K ohm ±10% ¼W	2
		Carbon 22K ohm ±10% ¼W	3
		Carbon 33K ohm ±10% ¼W	2
		Carbon 33K ohm ±10% ¼W	1
		Carbon 56K ohm ±10% ¼W	3
		Carbon 100K ohm ±10% ¼W	2



- 5 -



TR201 ~ TR203, TR205, TR215, TR217 ~ 25C930
TR204, TR206 ~ TR208, TR210, TR216 ~ 25C538
TR209, TR211, TR212 ~ 25C693
TR213 ~ 25C674
TR214 ~ 25C929
IC201, IC202 ~ LA1221
~ IC203 ~ LA3300
D201 ~ D208 ~ 15188

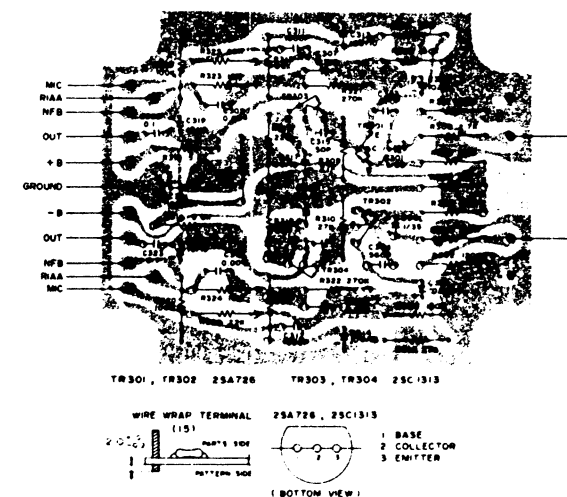
PARTS LIST

Key No.	Part No.	Description	Q'ty
IF, MPX P.C.B. ASSY			
R257		Carbon 100K ohm $\pm 10\%$ $\frac{1}{4}W$	1
R238,249		Carbon 120K ohm $\pm 10\%$ $\frac{1}{4}W$	2
R248		Carbon 120K ohm $\pm 10\%$ $\frac{1}{4}W$	1
		(SEMICONDUCTORS)	
D201,202, 203,204, 205,206, 207,208, 209	202 5 9110 18820	Diode 1S188 (FM1)	9
TR213, TR204,206, 207,208, 210,216	203 5 4500 67440 203 5 5100 53640	Transistor 2SC674 (D) Transistor 2SC536 (D)	1 6
TR209,211, 212	203 5 5100 69361	Transistor 2SC693 (FD)	3
TR214 TR201,202, 203,205, 215,217	203 5 5500 92950 203 5 5500 93040	Transistor 2SC929(E) Transistor 2SC930(D)	1 6
IC201,202 IC203	206 5 0121 22110 206 5 0663 30010	IC LA-1221 IC LA-3300	2 1
EQUALIZER P.C.B. ASSY			
122	131 0 4001 42100	Equalizer P.C.B. assy	1
		(CAPACITORS)	
C313,314, 317,318,		Electrolytic 100 μ F 10V	5

Key No.	Part No.	Description	Q'ty
EQUALIZER P.C.B. ASSY			
321		Electrolytic 10 μ F 10V	2
C305,306		Electrolytic 10 μ F 10V	2
C319,320		Ceramic 560pF $\pm 10\%$ 50V	2
C303,304		Ceramic 50pF $\pm 10\%$ 50V	2
C315,316		Mylar 0.001 μ F $\pm 5\%$ 50V	2
C311,312		Mylar 0.015 μ F $\pm 5\%$ 50V	2
C307,308		Mylar 0.004 μ F $\pm 5\%$ 50V	2
C309,310		Mylar 0.1 μ F $\pm 10\%$ 50V	2
C322,323		Tantal 1 μ F 35V	2
C301,302			2
		(RESISTORS)	
R323,324		Carbon 18K ohm $\pm 5\%$ $\frac{1}{4}W$	2
R321,322		Carbon 270K ohm $\pm 5\%$ $\frac{1}{4}W$	2
R328		Carbon 10K ohm $\pm 10\%$ $\frac{1}{4}W$	1
R325,326		Carbon 22K ohm $\pm 10\%$ $\frac{1}{4}W$	2
R301,302,		Carbon 120K ohm $\pm 10\%$ $\frac{1}{4}W$	2
R305,306,		Carbon 150K ohm $\pm 10\%$ $\frac{1}{4}W$	2
R319,320		Carbon 100K ohm $\pm 10\%$ $\frac{1}{4}W$	2
R327		Carbon 15K ohm $\pm 10\%$ $\frac{1}{4}W$	1
R317,318		Carbon 220 ohm $\pm 10\%$ $\frac{1}{4}W$	2
R303,304		Carbon 2.7K ohm $\pm 10\%$ $\frac{1}{4}W$	2
R309,310		Carbon 27K ohm $\pm 10\%$ $\frac{1}{4}W$	2
R311,312		Carbon 270 ohm $\pm 10\%$ $\frac{1}{4}W$	2
R315,316		Carbon 5.6K ohm $\pm 10\%$ $\frac{1}{4}W$	2
R313,314		Carbon 68K ohm $\pm 10\%$ $\frac{1}{4}W$	2
R307,308		Carbon 82K ohm $\pm 10\%$ $\frac{1}{4}W$	2
		(SEMICONDUCTORS)	
TR301,302		Transistor 2SA726	2
TR303,304		Transistor 2SC1313	2

NOTES: 1. Part orders must contain Model Number, Part Number and Description
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EQUALIZER P.C. ASS'Y BOTTOM VIEW



EQUALIZER P.C. ASS'Y TOP VIEW

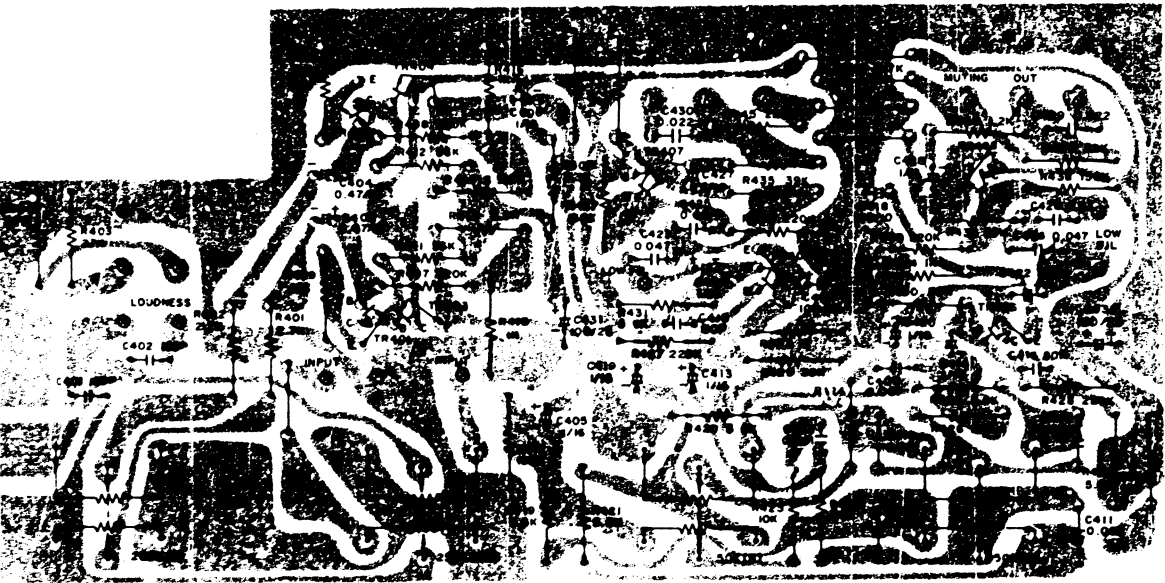


PARTS LIST

Key No.	Part No.	Description	Q'ty	Key No.	Part No.	Description	Q'ty
PRE AMP P.C.B. ASSY				PRE AMP P.C.B. ASSY			
123	131 0 4001 41901	Pre amp. P.C.B. assy	1	433,434		Carbon 1.2K ohm $\pm 10\%$ $\frac{1}{4}W$	2
	4 2229 23460	Variable resistor, volume	1	R443,444		Carbon 2.7K ohm $\pm 10\%$ $\frac{1}{4}W$	4
	4 2229 23610	VR 250K-MN, balance	1	R401,402,			
	4 2229 23620	VR 50KB-2, tone	2	447,448			
(CAPACITORS)				R405		Carbon 3.3K ohm $\pm 10\%$ $\frac{1}{4}W$	1
C415,416		Ceramic 80pF $\pm 20\%$ 50V	2	R413,414		Carbon 3.9K ohm $\pm 10\%$ $\frac{1}{4}W$	2
C407,408		Mylar 0.001 μ F $\pm 5\%$ 50V	2	R419,420,		Carbon 5.6K ohm $\pm 10\%$ $\frac{1}{4}W$	8
C425,426		Mylar 0.03 μ F $\pm 5\%$ 50V	2	421,422,			
C423,424		Mylar 0.047 μ F $\pm 5\%$ 50V	2	431,432,			
C409,410,		Mylar 0.082 μ F $\pm 5\%$ 50V	4	441,442			
411,412				R423,424		Carbon 10K ohm $\pm 10\%$ $\frac{1}{4}W$	2
C403,404		Electrolytic 0.47 μ F 16V	2	R409,410		Carbon 12K ohm $\pm 10\%$ $\frac{1}{4}W$	2
C405,406,		Electrolytic 1 μ F 16V	10	R425,426,		Carbon 22K ohm $\pm 10\%$ $\frac{1}{4}W$	4
413,414,				445,446			
419,420,				R403,404		Carbon 27K ohm $\pm 10\%$ $\frac{1}{4}W$	2
421,422				R429,430,		Carbon 39K ohm $\pm 10\%$ $\frac{1}{4}W$	4
427,428				435,436			
C417,418		Electrolytic 100 μ F 10V	2	R411,412		Carbon 56K ohm $\pm 10\%$ $\frac{1}{4}W$	2
C431,432		Electrolytic 100 μ F 25V	2	R417,418,		Carbon 150K ohm $\pm 10\%$ $\frac{1}{4}W$	4
C401,402		Styrol 100pF $\pm 5\%$ 50V	2	437,438			
C429,430		Mylar 0.022 μ F $\pm 5\%$ 50V	2	R407,408,		Carbon 220K ohm $\pm 10\%$ $\frac{1}{4}W$	6
(RESISTORS)				427,428			
R406		Carbon 100 ohm $\pm 10\%$ $\frac{1}{4}W$	1	439,440			
R415,416,		Carbon 1K ohm $\pm 10\%$ $\frac{1}{4}W$	4	(SEMICONDUCTORS)			
				TR401 - 408		Transistor 2SC1313	8

- Notes: 1. Parts orders must contain Model Number, Part Number and Description.
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PRE AMP. P.C. ASS'Y BOTTOM VIEW

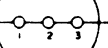


TR401-TR408 2SC1313 F or G

WIRE WRAP TERMINAL (26)



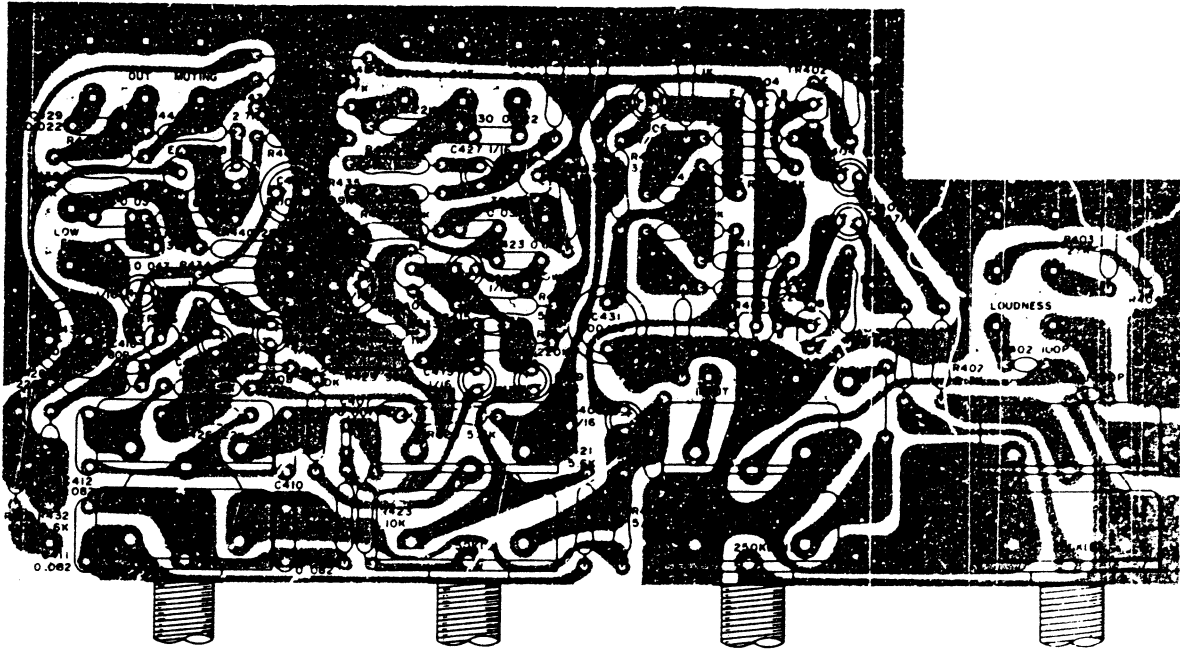
2SC1313



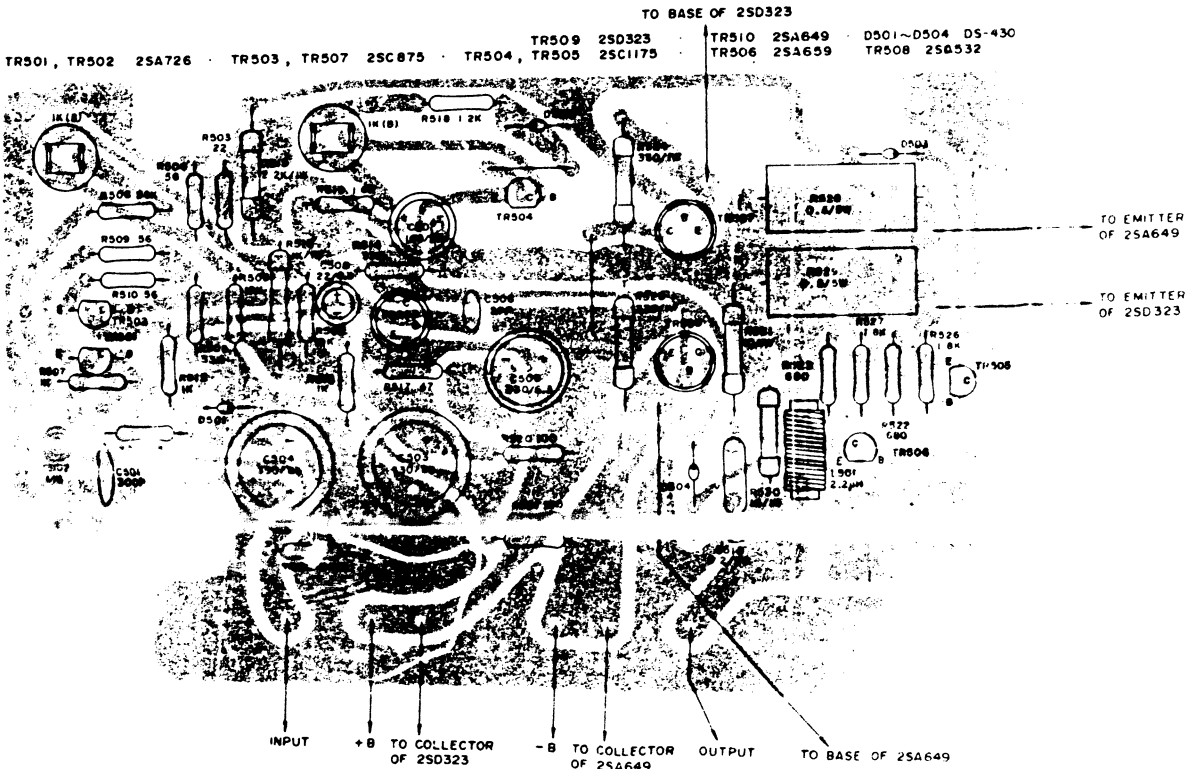
(BOTTOM VIEW)

1. BASE
2. COLLECTOR
3. EMITTER

PRE AMP P.C. ASS'Y TOP VIEW



MAIN AMP P.C. ASS'Y TOP VIEW

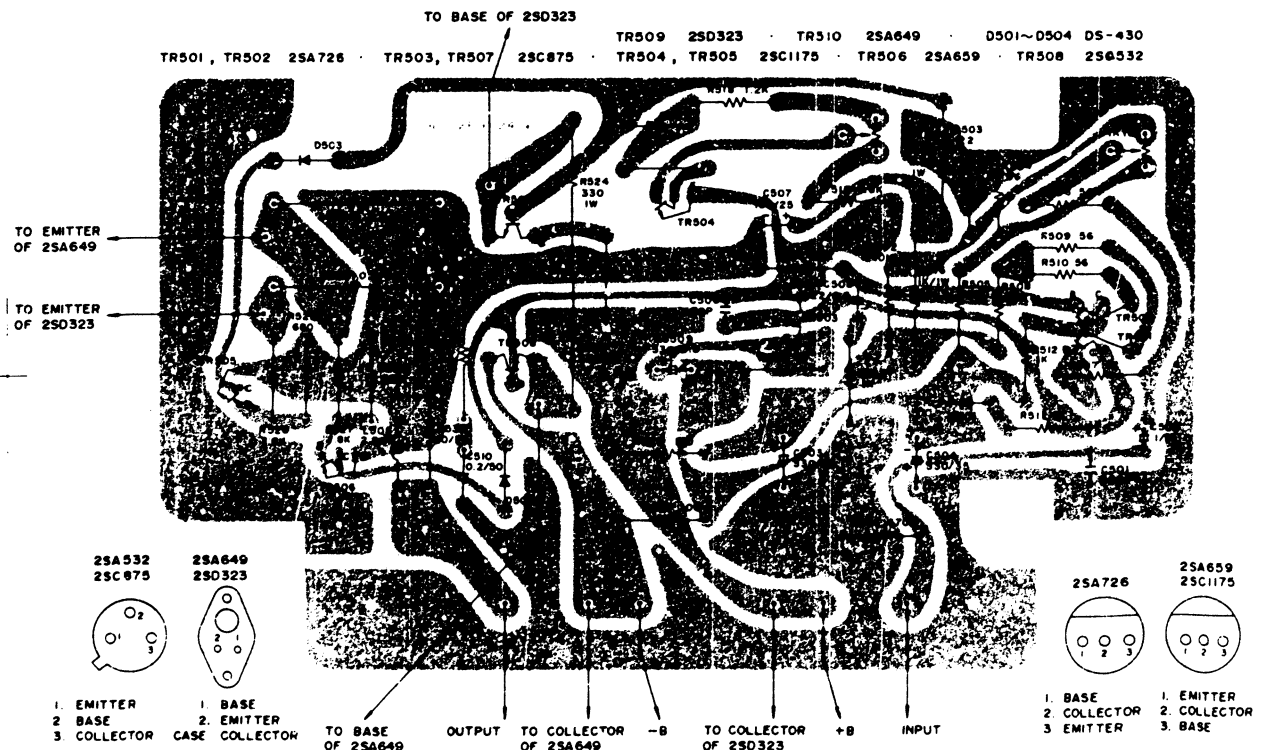


PARTS LIST

Key No.	Part No.	Description	Q'ty	Key No.	Part No.	Description	Q'ty
MAIN AMP P.C.B ASSY				MAIN AMP P.C.B ASSY			
121	131 0 4001 33002	Main AMP P.C.B. assy	1	R524,525		Carbon 330 ohm $\pm 10\%$ 1W	2
L501	4 2229 22910	Semi-fixed VR B-1K ohm	2	R522,523		Carbon 680 ohm $\pm 10\%$ 1/2W	2
	4 2539 20160	Choke coil 2.2 μ F	1	R516		Carbon 1K ohm $\pm 10\%$ 1W	1
	131 2 3614 13400	Mount, P.C.B.	2	R507,511		Carbon 1K ohm $\pm 10\%$ 1/2W	4
	131 2 3701 12900	Mount, electric part	1	512,513			
	131 2 3701 13000	Mount, electric part	1	R518		Carbon 1.2K ohm $\pm 10\%$ 1/2W	1
	131 2 6201 19301	Plate, heat sink	1	R519,526,527		Carbon 1.8K ohm $\pm 10\%$ 1/2W	3
	4 2359 21500	Power trans socket	2	R515		Carbon 2.2K ohm $\pm 10\%$ 1W	1
		(CAPACITORS)		R502,505		Carbon 10K ohm $\pm 10\%$ 1/2W	2
C506		Ceramic 50pF $\pm 20\%$ 50V	1	R514		Carbon 33K ohm $\pm 10\%$ 1/2W	1
C501		Ceramic 300pF $\pm 20\%$ 50V	1	R508		Carbon 33K ohm $\pm 10\%$ 1/2W	1
C510		Mylar 0.22 μ F $\pm 10\%$ 50V	1	R506		Carbon 56K ohm $\pm 10\%$ 1/2W	1
C502		Electrolytic 1 μ F 16V	1	R501		Carbon 470K ohm $\pm 10\%$ 1/2W	1
C508		Electrolytic 22 μ F 6.3V	1	R528,529		Carbon 0.5 ohm $\pm 10\%$ 5W	2
C507		Electrolytic 100 μ F 25V	1			(SEMICONDUCTORS)	
C509		Electrolytic 330 μ F 6.3V	1	TR510		Transistor 2SA649	1
C503,504		Electrolytic 330 μ F 35V	2	TR509		Transistor 2SD323	1
		(RESISTORS)		TR501,502		Transistor 2SA726	2
R530,531		Carbon 10 ohm $\pm 10\%$ 1W	2	TR503,507	203 5 4600 87550	Transistor 2SC875 (E)	2
R503		Carbon 22 ohm $\pm 10\%$ 1/2W	1	TR504,505	203 5 6701 17540	Transistor 2SC1175 (E)	2
R517		Carbon 47 ohm $\pm 10\%$ 1/2W	1	TR506	203 5 6800 65940	Transistor 2SA659 (D)	1
R504,509,510		Carbon 56 ohm $\pm 10\%$ 1/2W	3	TR508	203 5 7100 53250	Transistor 2SA532 (E)	1
R520,521		Carbon 100 ohm $\pm 10\%$ 1/2W	2	D501,502,503,504	205 5 9020 43011	Diode DS430	4

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3. Ordering quantity of screws and/or resistors must be multiple of 10 pcs.

MAIN AMP P.C. ASS'Y BOTTOM VIEW

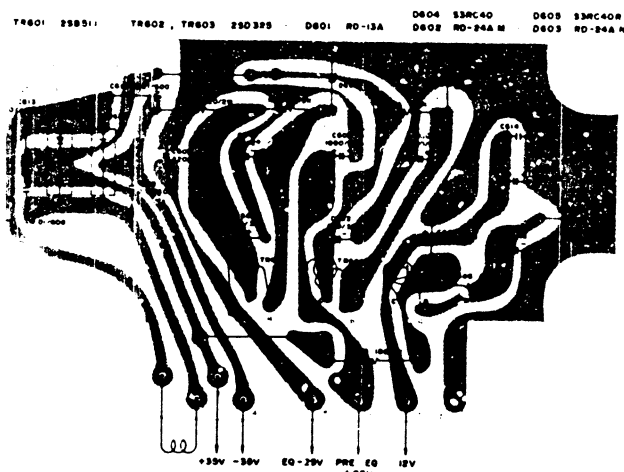


PARTS LIST

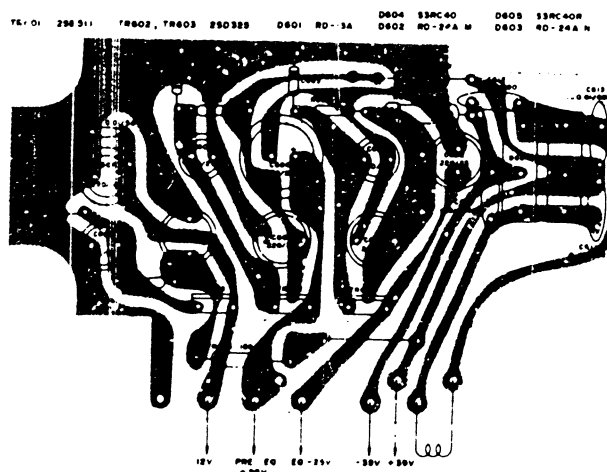
Key No.	Part No.	Description	Q'ty	Key No.	Part No.	Description	Q'ty
POWER SUPPLY P.C.B. ASSY				POWER SUPPLY P.C.B. ASSY			
124	131 0 40011 40602	Power supply P.C.B. assy	1	(RESISTORS)			
(CAPACITORS)				R602,604, 606		Carbon 1.5K ohm $\pm 10\%$ $\frac{1}{4}W$	3
C608		Electrolytic 100 μ F 16V	1	R603		Metal film 100 ohm 1KW	1
C609		Electrolytic 220 μ F 16V	1	R605		Metal film 180 ohm $\pm 10\%$ 1W	1
C606		Electrolytic 1000 μ F 25V	1	R601		Metal film 220 ohm $\pm 10\%$ 2W	1
C601,605		Electrolytic 100 μ F 25V	2	(SEMICONDUCTORS)			
C602		Electrolytic 220 μ F 25V	1	TR601	203 5 6470 51140	Transistor 2SB511	1
C614		Ceramic 0.01 μ F $\pm 10\%$ 50V	1	TR602,603	203 5 8210 32540	Transistor 2SD325	2
C603,604, 607		Electrolytic 22 μ F 35V	3	D604		Diode S3RC-40	1
C610,611, 612,613		Ceramic 0.01 μ F $\pm 20\%$ 600V	4	D605		Diode S3RC-40R	1
				D601		Diode RD-13A	1
				D602		Diode RD-24A (M)	1
				D603		Diode RD-24A (N)	1

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POWER SUPPLY P.C. ASS'Y BOTTOM VIEW



POWER SUPPLY P.C. ASS'Y TOP VIEW

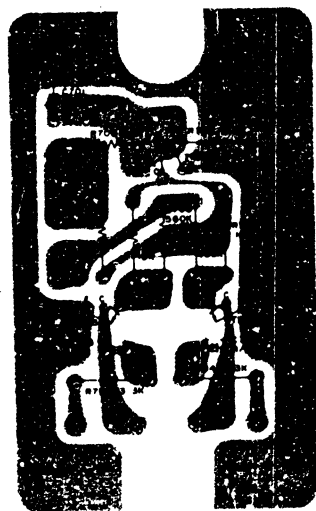


PARTS LIST

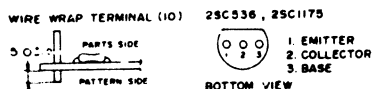
Key No.	Part No.	Description	Q'ty	Key No.	Part No.	Description	Q'ty
MUTING P.C.B. ASSY				SWITCH P.C.B. ASSY			
127	131 0 4001 41600	Muting P.C.B. assy	1	126	131 0 4001 41701 4 2319 23230	Switch P.C.B. assy Switch, push 8 keys	1
C702,703 C701		(CAPACITORS) Electrolytic 1 μ F 16V Electrolytic 330 μ F 6.3V	2 1	C801,802		(CAPACITOR) Mylar 0.01 μ F $\pm$ 20% 50V	2
R704,709 R702 R703 R708,705 R701 R706,707		(RESISTORS) Carbon 3.3K ohm $\pm$ 10% $\frac{1}{4}$ W Carbon 6.8K ohm $\pm$ 10% $\frac{1}{4}$ W Carbon 22K ohm $\pm$ 10% $\frac{1}{4}$ W Carbon 10K ohm $\pm$ 10% $\frac{1}{4}$ W Carbon 120K ohm $\pm$ 10% $\frac{1}{4}$ W Carbon 560K ohm $\pm$ 10% $\frac{1}{4}$ W	2 1 1 2 1 2	R801,802		(RESISTOR) Carbon 2.7K ohm $\pm$ 10% $\frac{1}{4}$ W	2
TR702,703 TR701	203 5 5100 53650 203 5 6701 17550	(SEMICONDUCTORS) Transistor 2SC536 (F) Transistor 2SC1175 (E)	2 1	DIAL LAMP P.C.B. ASSY			
				125	131 0 4001 42000 4 2359 20930 4 6129 20280 4 6129 20360	Dial lamp P.C.B. assy Fuse holder Pilot lamp Pilot lamp, pointer Resistor, Carbon 6.8 ohm $\pm$ 10% $\frac{1}{4}$ W	1 10 5 1 1

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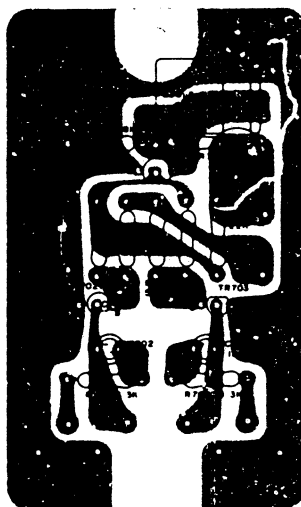
MUTING P.C. ASS'Y
BOTTOM VIEW



TR701 2SC1175 TR702, TR703 2SC536

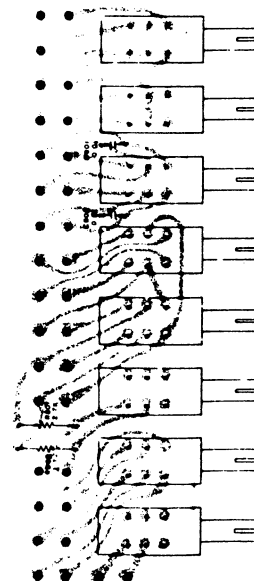


MUTING P.C. ASS'Y
TOP VIEW

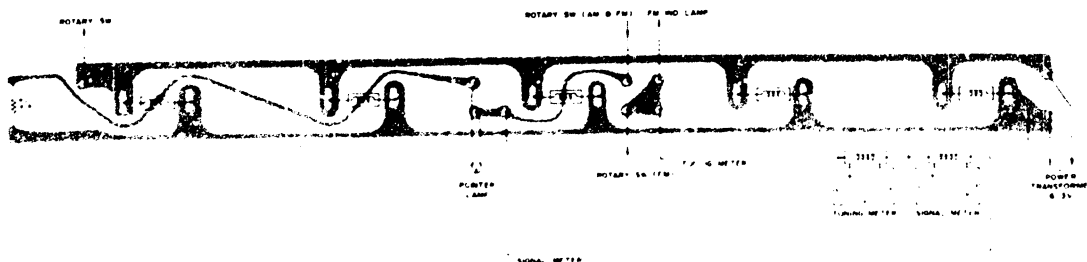


TR701 2SC1175 TR702, TR703 2SC536

SWITCH P.C. ASS'Y
BOTTOM VIEW



DIAL LAMP P.C. ASS'Y BOTTOM VIEW



SCHEMATIC DIAGRAM

